



## Maine STEP-UP Program Agreement

### Leadership Track

### CYRO Industries

#### PURPOSE

The greatest human imperative of the 21<sup>st</sup> century will be using earth's resources in sustainable ways to meet human needs and protect the diversity of our ecosystems. Through its own natural cycles, the earth provides clean water and air, fertile soils, and a myriad of plants and animals, all of which are essential to sustain life. We must find ways of producing products and providing services that model nature's cyclical design and sustain its productive capacities. In addition, where we can we must restore those capacities diminished by past misuse.

Environmental regulatory programs of the last 30 years have done much to clean and protect our waters, air and land. Now, new approaches to environmental protection are needed if continuous improvements are to be realized.

The Maine Department of Environmental Protection, hereinafter referred to as DEP, and CYRO Industries, hereinafter referred to as CYRO, have agreed to explore new ways of protecting the environment that go beyond regulatory compliance. CYRO commits to continuously improve its business practices to protect people and the environment. CYRO will publicly report on its progress to inspire other businesses to seek improvement in their own environmental performance.

DEP commits to assist CYRO on its "climb up the mountain" as CYRO accepts the challenge—to find environmentally sustainable ways of doing business. The Goals Toward Sustainability set forth below in Section 2. B. refer to the "Pathways" described in the "Climbing the Mountain" diagram found in the Department's A Guide for Your Business: Smart Production and the Maine STEP-UP Program.

## 1. INTRODUCTION

CYRO Industries is a joint partnership of Cytec Plastics Inc. (a subsidiary of Cytec Industries Inc.) and Rohacryl, Inc. (a subsidiary Degussa AG). The approximately 290 employees at CYRO's Sanford, Maine facility (hereinafter referred to as CYRO) manufacture acrylic molding resins and plastic sheet products.

CYRO commits to the Maine Department of Environmental Protection (hereinafter referred to as DEP) to strive toward sustainability goals for its business with the assistance of the DEP, which will provide technical assistance and recognition for achievements made by CYRO under this Agreement during its three-year period. The Department will assign a senior staff person to work with CYRO during the design and implementation of the Agreement.

## 2. PERFORMANCE COMMITMENTS

### A. Environmental Business Practices

- **Compliance Status** -- CYRO is regulated by both state and federal environmental agencies. The facility currently holds the following environmental permits:

Maine DEP Air Emissions License (A-393-72-A-R),  
Sanford Sewerage District Permit (SS-CYRO-(1)(99)),  
Maine MEPDES Permit (#ME0022667)/Waste Discharge License  
Discharge of Non-Contact Cooling Water (#W001914-5R-C-M),  
Maine Biomedical Waste Generator Permit (#2579),  
Maine Site Location of Development Permit (L-13713),  
Maine Hazardous Waste Treatment Facility Abbreviated License for  
Beneficial Use or Reuse On Site (#O-000155), and  
EPA Hazardous Waste Activity Notification (Facility Number -  
#MED040249096).

### B. Goals Toward Sustainability

- **Environmental Management Pathway To Sustainability** - In 2000, CYRO implemented an Environmental Management System (EMS) to minimize the environmental impact of its operations. Employees from all levels of the facility were involved in the development and implementation of the EMS. After two successful audits by an ANSI/RAB-accredited 3<sup>rd</sup>-party registrar, Quality Systems Registrars, Inc., the facility received ISO 14001 certification in November 2000. The facility continues its ISO 14001 certification by participating in annual 3<sup>rd</sup>-party audits that ensure that the EMS continues to meet the systems standards set by ISO 14001. CYRO's ISO 14001 Certificate Number is QSR-EMS-004.

CYRO commits to remaining ISO 14001-certified for the duration of this Agreement.

- **Workers and Community Pathway To Sustainability** - CYRO trains employees on the concepts of the EMS and ISO 14001 during new employee orientation and annually thereafter. This training states that the EMS “concerns all functions, departments and areas in the company.” To this end, Standard Operating Procedures and other systems are used to inform employees about any part of their jobs that might, if not performed correctly, cause a significant environmental impact or result in the failure of CYRO to meet an environmental requirement. Additionally, routine communications through e-mail, meetings, bulletin boards, and CYRO TV help employees to understand the objectives, targets, and performance of the facility, as well as news relating to important environmental issues.

To further develop the environmental awareness of employees, CYRO involves a plant-wide, cross-functional team to perform monthly audits for compliance with environmental requirements (*i.e.* permit conditions, regulatory requirements, internal standards) and conformance to the ISO 14001 standard. This group of hourly and salaried employees identifies potential compliance issues, EMS weaknesses, and Opportunities for Improvement of the systems that they audit.

To improve involvement of the public in its EMS, CYRO will establish a public advisory committee to serve as a forum for discussing its progress toward the goals of this STEP-UP Program Agreement. CYRO will meet with this group at least semi-annually to inform them of its efforts to achieve environmental sustainability and to solicit their input. This group’s feedback will be considered during each management review of the EMS, as required by ISO 14001.

- **Energy Pathway To Sustainability** - CYRO will reduce emissions resulting from energy usage by 15% over the duration of this Agreement. This target will be measured in (equivalent-CO<sub>2</sub> emissions)/(thousand pounds of production) and will be compared against 2001 energy usage. CYRO anticipates meeting this target by identifying conservation and efficiency opportunities with the help of external experts. The specific programs developed to meet this target will be described in the semiannual reporting required by Section 2. C. of this Agreement.

CYRO currently burns #6 fuel oil as its primary source of energy for producing steam for manufacturing processes and area heating. Though a cost-effective energy choice, use of #6 Fuel Oil negatively impacts the environment due to its contaminants and combustion by-products. Within the first year of this Agreement, CYRO will seek a better energy solution by exploring the feasibility of cogenerating steam and electricity using natural gas. Cogeneration using natural gas will reduce toxic air emissions from the

steam production process as well as offset the demand for electricity produced by coal, oil, and nuclear power plants. If the project is feasible, additional goals will be established for project implementation.

- **Toxics Reduction Pathway To Sustainability** - CYRO generates a significant amount of hazardous waste because methyl methacrylate, the primary raw material used in production, is flammable. Many process waste streams are defined by Maine's Hazardous Waste Rules as hazardous due to the characteristic of ignitability. To reduce the amount of hazardous waste sent offsite for disposal (primarily by burning as a fuel) CYRO recovers a large percentage of the methyl methacrylate contained in certain waste streams in a RCRA-permitted solvent recovery system. Since the late 1980s, CYRO has reduced the amount of hazardous waste treated on- and disposed of off-site by almost 50%.

CYRO will reduce the amount of hazardous waste sent off-site by 20% over the duration of this Agreement. This target will be measured in (pounds hazardous waste sent off-site for disposal)/(thousand pounds of production) and will be compared against 2001 performance. CYRO anticipates meeting this target by modifying its processes to allow for the recycling of a hazardous waste stream that is currently sent off-site for disposal. This program will require equipment and procedural changes, as well as a change to its Hazardous Waste Treatment Facility Abbreviated License. The specific programs developed to meet this target, which may include additional on-site recovery as well as product substitution, will be described in the semiannual reporting required by Section 3 of this Agreement.

- **Air and Water Emissions Pathway To Sustainability** - CYRO has reduced toxic air emissions (as defined by EPA's Toxics Release Inventory) by over 90% since 1990. All major emission sources are controlled by pollution control equipment that is operated and maintained to minimize emissions.

Over the duration of this Agreement, CYRO will further reduce toxic air emissions by 20%. This target will be measured in (pounds toxic air emissions)/(thousand pounds of production) and will be compared against 2001 performance. CYRO anticipates meeting this target by identifying ways to reduce high volume/low concentration fugitive emissions, primarily of MMA, from sources that are not currently controlled or by developing ways to control the largest of these sources. The specific programs developed to meet this target will be described in the semiannual reporting required by Section 3 of this Agreement.

### **C. Measurement Methods and Reporting Progress**

Energy reduction will be measured in (equivalent-CO<sub>2</sub> emissions)/(thousand pounds of production) and will be compared against 2001 energy usage.

Hazardous waste reduction will be measured in (pounds hazardous waste sent offsite for disposal)/(thousand pounds of production) and will be compared against 2001 performance. CYRO will report reductions in waste sent for off-site disposal and track in its reporting the results of its on-site recycling efforts.

Toxic air emissions reductions will be measured in (pounds toxic air emissions)/(thousand pounds of production) and will be compared against 2001 performance.

CYRO will describe programs and report its progress towards attaining these commitments to DEP semiannually. CYRO will also post the information contained in the progress report on its website.

CYRO will describe programs and report progress at each meeting of its public advisory committee.

#### **D. Public Involvement**

CYRO will communicate STEP-UP objectives and progress in at least semiannual public advisory committee meetings and utilize these meetings to receive feedback on its sustainability initiatives.

#### **E. Mentoring**

CYRO believes strongly in the benefits of implementing Environmental Management Systems and in the participation in the STEP-UP program for all companies. CYRO also recognizes that, for many organizations, beginning the climb “up the mountain” is the most difficult part of the journey. Therefore, CYRO will mentor at least one other organization by providing knowledge, experience, examples, and support to design and implement an Environmental Management System and to prepare for and implement an Agreement with DEP’s STEP-UP Program.

#### **F. Relationship**

CYRO will work closely with the DEP to achieve its sustainability goals by complying with regulatory requirements while working to find mutually agreeable solutions to issues that may stand in the way of achieving its environmental improvement goals. Specifically:

- DEP will assign a STEP-UP Program Contact to work with CYRO;
- CYRO will meet regularly, but at least semi-annually, with the DEP STEP-UP Program Contact to report progress and discuss impediments or other relevant issues;
- DEP STEP-UP Program Contact will participate in public advisory committee meetings, as requested by CYRO;

- DEP will make staff available to CYRO for technical and regulatory assistance. This assistance will be provided consistent with existing State law and agency policy;
- CYRO will work with DEP to identify opportunities to improve efficiencies for both parties, as well as for other current and future STEP-UP companies.
- DEP expects to forego civil penalties for certain types of first-time violations discovered in the process of providing assistance or disclosed as a result of compliance audits performed by CYRO when CYRO corrects the non-compliant condition within the shortest practicable time period, and in all cases within 90-days of discovery. Violations excluded from this provision are those listed in DEP's Small Business Compliance Incentives Policy, Section III (as amended February 14, 1996) and its Supplemental Environmental Projects Policy, Section V (as amended June 15, 2000). Regular or necessary compliance inspections performed as part of day-to-day business at DEP are not subject to this provision.

#### **G. Recognition**

DEP will recognize CYRO's participation in the STEP-UP Program by including specific information on the STEP-UP web pages maintained by the State, and in press releases from time-to-time to keep the general public informed of CYRO's status in the program. CYRO will also receive a Governor's Award for Environmental Excellence without the need for application when any Sustainability Goal detailed in this Agreement is achieved.

### **3. REPORTING**

As indicated in Section 2. C. of this Agreement, CYRO will forward annual reports to the DEP citing accomplishments toward sustainability goals and identifying any need to adjust goals. The report will also assess the effectiveness of the working relationship between DEP and CYRO and recommend changes that might be needed. Additionally, CYRO will forward a progress report six months after the initiation of this Agreement, and annually thereafter, to inform the DEP of progress in meeting the commitments in this Agreement.

In response to these reports, DEP will provide feedback to CYRO about its progress in moving towards sustainability. DEP will also identify any opportunities for improvement that may aid CYRO in reaching its goals more quickly and/or more efficiently.

### **4. TERMINATION**

Either party to this Agreement may terminate the participation of CYRO in the STEP-UP Program with 30-days notice to the other party.

**Maine STEP-UP Program**

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WITNESS here today, November 7, 2003 that the undersigned parties enter into this agreement.

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John E. Baldacci, Governor State of Maine

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Richard K. Healy, Plant Manager  
CYRO Industries